



# **Phase One Process Improvement Program Implementation Plan**

**New Jersey Department of Transportation  
Capital Program Management  
Division of Capital Program Support  
Program Management Office**

**August 8, 2008**

## **Purpose of the Program Implementation Plan**

The Program Implementation Plan is written at the program level and is intended to provide a single plan for implementing the Phase One Process Improvement Program projects. It provides a general overview of the scope and objectives for the set of projects and details on critical integration areas. The Program Implementation Plan is a very tactical document and is intended to provide insight and guidance to key stakeholders and the team members executing implementation tasks.

The Program Implementation Plan requires approval by the Assistant Commissioner, Capital Program Management as it affects several key processes. Also, a number of divisions and units will be affected.

## **Program Scope**

The Phase One Process Improvement Program includes five projects; four are process improvement projects and one is the Capital Project Delivery web site project, which will be used to publish capital project delivery process and procedure documentation.

All four process improvement projects include producing significant process documentation (flow charts, procedures, etc) and will require specific communication, training, and document publication. Some will include significant organization changes as well.

### ***ERRORS & OMISSIONS***

Significant changes to process are included in the Errors & Omissions (E&O) improvement. The E&O Process goal is to reinforce Design accountability and recover additional project costs due to carelessness or negligence from Consultant Designers. No significant organization changes have been identified or have any critical integration points with other Phase One projects.

### ***QUALITY MANAGEMENT***

The Quality Management process improvements include major changes to the process for quality assurance and quality control. Specifically the primary change is to shift accountability to Designers. The current quality review processes will be integrated into the Preliminary and Final Design phases. Designers, Project Managers, and Subject Matter Experts (SMEs) will be held accountable for project quality during the design process. This will be accomplished by eliminating long, costly design reviews by the NJDOT and will be replaced by interactive communications between design consultants, project managers and SMEs during the design process and a value solutions review at the end of the Preliminary and Final Design phases by the Value Solutions Team.

The current Quality Assurance (QA) unit will be eliminated and the personnel will transfer to other areas, such as the Value Solutions Team or the Bureau of Construction Management performing the Constructability and Construction Scheduling functions. Organization change plans for this effort must be integrated.

### ***PERFORMANCE EVALUATION***

Performance evaluation of consultants will also see significant changes in process due to the changes in Quality Management process. The Performance Evaluation Process goal is to develop a clear, concise, and controlled procedure for performing Consultant Performance Evaluations. The Consultant Evaluation Manual is being revised and will include these changes.

## ***BUREAU OF CONSTRUCTION MANAGEMENT***

The Bureau will contain personnel performing the Constructability, Construction Scheduling, and Contract Administration functions. The personnel will likely be reassigned from the current QA unit.

### ○ **CONSTRUCTABILITY**

The primary objective of the Constructability function is to make sure constructability is built into every contract.

### ○ **CONSTRUCTION SCHEDULING**

The primary objective of the Construction Scheduling function is to make sure construction schedules from designers are realistic.

### ○ **CONTRACT ADMINISTRATION**

The Contract Administration function, which is part of the current QA unit, is not changing its scope. The Contract Administration objectives are to effectively process the contract documents from PS&E through contract award and ensure realistic designer construction cost estimates. The only change is in the reporting relationship. Personnel performing the Contract Administration function will continue to interface with all Project Managers, Construction Services personnel, Subject Matter Experts (SMEs), Designers, the Federal Highway Administration (FHWA), and potential bidders.

## ***CAPITAL PROJECT DELIVERY WEB SITE***

The Capital Project Delivery (CPD) web site will be the publishing medium for all capital project delivery-related process and procedures. Initially this will include just the four process improvement areas noted in Phase One. Ultimately this will cover all related processes.

## **Implementation Schedule**

Major milestones are:

- 05/20/2008 – Completion of communication plan
- 05/20/2008 – Completion of training plan
- 05/28/2008 – Full approval of all process documentation
- 06/03/2008 – Approved implementation plan
- 06/11/2008 – Completion of all process documentation
- 06/16/2008 – Publication complete
- 08/8/2008 – Communication complete
- 08/30/2008 – Completion of training materials
- 09/30/2008 – Training complete
- 11/15/2008 – Phase One close out
- 01/02/2009 – All projects using new process

Each project has its own detailed plan and schedule with milestones that align with the overall program milestones.

## **Communication Plan**

Three primary communication events have been identified for the Phase One Implementation.

- **Initial Communication** – A mass email communication will be generated in advance of the “go live” date for Phase One. This email will be a general communication providing an overview of the scope and impact of the change and a schedule for implementation.
- **Production Communication** – A mass email communication will be generated the day of the “go live” date for Phase One. This email will notify NJDOT staff, FHWA, and design consultants that the new processes are in place and are to be followed.
- **Training Communication** – A mass email communication will be generated following the “go live” date to announce on-line training sessions.

## **Procedures & Guidelines**

### ***OVERVIEW***

- Four Capital Project Delivery processes are being changed as part of the Phase One implementation.
- Capital projects are at various phases within the overall project lifecycle and need to be transitioned from the current processes to the future during their lifecycle.

### ***IMPLEMENTATION GUIDANCE***

#### **▪ ERRORS & OMISSIONS**

All capital projects will switch to the new process on the day of the “go live” date.

#### **▪ QUALITY MANAGEMENT and PERFORMANCE EVALUATION**

The Quality Management process has direct impact on the Performance Evaluation process. Therefore, the implementation of these process changes must be integrated together. Depending on which phase a capital project is in, it may be more appropriate to:

- (A) Follow the old process with exceptions
  - The Project Manager (PM) shall be responsible for managing the Preliminary and Final Design Submission, providing distribution to the Value Solutions Team, FHWA (if required) and SME’s as determined by the PM/Program Manager/Designer. The PM shall also be responsible for comment collection, resolution and certification.
  - Some projects will be completed (processing of contract documents) by the current QA Unit.
- (B) Follow the new process with exceptions
  - Project Manager may waive the submission of a Design Communication Report (DCR) based on project schedule
  - Project Manager may waive the submission of a Quality Checklist based on project schedule
  - Use old Consultant Evaluation form

See **Appendix – Project Transition Inventory Report** for project-specific exceptions

- (C) Follow the new process with no exceptions
  - Design Communication Report (DCR) and Quality Checklist required
  - Use new Consultant Evaluation form

All Designers (in-house and consultant) are required to create and electronically submit a Quality Management Plan. The Designer will upload the Quality Management Plan onto the NJDOT Capital Project Delivery Website, Designer Upload page, within 60 calendar days.

Input from Project Management was obtained to understand the current state of the project inventory in order to determine which projects should be subject to which category. See **Appendix – Project Transition Inventory Report** for a comprehensive listing of affected projects.

#### **CONSTRUCTION MANAGEMENT**

The transfer of personnel to the Bureau of Construction Management will be at the discretion of CPM Senior Management. As fewer projects are using the old process, staff will be freed up and can be assigned to perform the Constructability, Construction Scheduling and Contract Administration functions.

## Appendix – Project Transition Inventory Report

<b>Project Manager</b>	<b>Project Title</b>	<b>Category</b>	<b>Exceptions</b>
Pennell, Edward	Rt 49 Cape May Branch Bridge	A	Quality Assurance Unit to complete
Bousenberry, Robert	Atsion Lake Dam	A	Quality Assurance Unit to complete
Maevsky, Andrew	Rt 47 Chapel Heights Ave/East Holly Ave-Site3	A	Quality Assurance Unit to complete
Bousenberry, Robert	Rt 206 Assiscunk Creek	A	Quality Assurance Unit to Advertise, Construction Management to complete
Inverso, Frank	Rt 73 (5) Marlton Circle Elimination	B	Project Management to complete
Mottola, Victor	Rt 30 and Pomona Road (CR575)	B	FDS, new process
Bousenberry, Robert	Rt 73 Fox Meadow Road/Fellowship Road	B	FDS, new process
Pennell, Edward	Rt 168 Benigno Boulevard	B	Quality Assurance Unit to complete PDS
Maevsky, Andrew	Rt 49/55 Interchange Improvements at Rt 55	B	Project Manager to complete PDS
Dietrich, Mark	Tuckahoe Rd NJT Bridge (aka Jim Leeds Cross) CR 557	B	Project Manager to complete PDS
Mottola, Victor	Rt 130 Brooklawn Circles	B	New, with exceptions
Bousenberry, Robert	Rt 30 5th to 8th Terrace East Drainage Improvement	B	New, with exceptions
Kaushal, Kunal	Rt 78 East of Tunnel Rd	A	Awarded, Quality Assurance Unit to complete
Kaushal, Kunal	Rt 50 Sunset Drive Intersection Improvements	A	Awarded, Quality Assurance Unit to complete
Deeck, Scott	Sign Structure Replacement Contract 2006-2	A	Awarded, Quality Assurance Unit to complete
Shah, Samir	Rt 27 Highland Park signal Upgrade	A	End of June award
Shah, Samir	Rt 80 Westbound W of Hope-Johnsonburg Rd	A	Award circulating, Construction Management Unit to complete
Conrey, James	Rt 22 Madison Avenue Drainage	A	Awarded, Construction Management Unit to complete
Kaushal, Kunal	Rt 78 East of Tunnel Rd	A	Quality Assurance Unit to Advertise, Construction Management Unit to complete

<b>Project Manager</b>	<b>Project Title</b>	<b>Category</b>	<b>Exceptions</b>
Patel, Mahesh	Rt 287 Easton Avenue Interchange Improvements	A	CRS complete, Construction Management to Award
Patel, Mahesh	Camden Central Gateway	A	Quality Assurance Unit to Advertise, Construction Management Unit to complete
McElmoyl, Larry	Rt 280 4 <sup>th</sup> St to Jersey City-Newark Tpk	A	Quality Assurance Unit to Advertise, Construction Management Unit to complete
Deeck, Scott	Rt 17 Linwood Avenue & Van Emburgh Ave Bridges, Deck Replacement	B	Construction Management to complete
Deeck, Scott	Rt 80 Westbound W of Rt 23 Interchange to E of Squirrelwood Rd	A	Project Manager to complete
McElmoyl, Larry	Rt 295 Northbound S of Rt 130 to S of Pedricktown Woodstown	A	Project Manager to complete
Kaushal, Kunal	Median Crossover Crash Prevention Contract #9	A	Quality Assurance Unit to complete FDS, Project Manager to do CRS
Patel, Mahesh	Rt 35 Red Bank Northern Gateway Operational Imp	A	Construction Management to complete
Patel, Mahesh	Rt 35/36 Eatontown	A	Construction Management to complete
Scott, Ed	Rt 206 East and west Mansfield Rd	B	Pipeline 4 to Maintenance
Scott, Ed	Rt 80 EB W of Hope Johnsonburg Rd to E of Ledgewood A	B	
McElmoyl, Larry	Rt 287 N of the Ramapo River to the vic of Franklin Ave	B	
Thorn, Scott	Rt 130 Cove Rd	A	Project Management to complete (Pipeline 4)
Lee, Robert	Rt 120 Paterson Plank Rd	A	Construction Management to complete
Eugene, Al	Rt 46 & Main Street Netcong	B	Construction Management to complete
Worth, George	Rt 206 & CR 513 Main Street Chester	B	Needs English conversion
Worth, George	Rt 80/287 Safety Improvements	B	Project manager to do CRS, Construction Management to do PS&E
Sundaram, Shan	Rt 46 Rt 3 valley rd	A	Project Manager to do CRS
Pandya, Jayesh	Rt 1 Sec 6V	B	
Birch, William	Rt 29 @ Bridge Boulevard Phase 1 (Formerly New Warren St)	B	

<b>Project Manager</b>	<b>Project Title</b>	<b>Category</b>	<b>Exceptions</b>
Campi, John	Rt 1 Millstone River Bridge Replacement	B	
Shin, Chan	Van Dyke Rd/Greenwood Ave Bridges over Trenton Branch	A	Quality Assurance Unit to complete FDS
Verner, Robert	Rt 18/CR516/CR527	B	
McCleerey, John	Rt 18 Extension Sec 3A	B	Project Manager to complete
Birch, William	Rt 72 Ship Bottom	B	
Hameed, Omar	Rt 130 Sec16	A	Quality Assurance Unit to complete PDS
Qureshi, Ahmad	Rt 35 Restoration Berkley Twp to Toms River (M.P. 0-4)	A	Quality Assurance Unit to complete PDS
Verner, Robert	Rt 206 Sec 15N	A	Project Manager to complete
Manz, Chris	Park Ave over Route 3	A	Quality Assurance Unit to Advertise, Construction Management to complete
Hochman, Steve	Rt 1&9T (25) St. Paul's Ave Bridge	A	Quality Assurance Unit to Advertise, Construction Management to complete
Gayaniilo, Percy	Clifton Ave/Nesbitt St Bridges over NJ TRANSIT	B	Construction Management to complete
Dave, Hardev	Rt 22 Weequahic Park Drainage Improvement	B	Project Manager to complete
Pate, Manu	Rt 78 Union/Essex Rehabilitation, Contract B	B	
Birch, William	Rt 33 Conrail Bridge	A	Quality Assurance Unit to complete
Thorn, Scott	Bridge Scour Countermeasures, Contract 2008-1	A	Quality Assurance Unit to complete
D'Arcy, Ed	Rt 22 Mountain Ave. Drainage	A	Quality Assurance Unit to complete
Kaushal, Kunal	Rt 45 Swedesboro-Franklinville Rd.	A	Project Manager to complete CRS
Dave, Hardev	Bloomfield Avenue Bridge	A	Quality Assurance Unit to complete
Sundaram, Shan	Rt 46, Main Street	B	Waiving DCR & Checklist
Eugene, Al	Rt183 bridge over the NJT Railroad	B	Project Manager to complete CRS, FD new

<b>Project Manager</b>	<b>Project Title</b>	<b>Category</b>	<b>Exceptions</b>
McCleerey, John	Rt 10, Section 2L & 3J	B	Project Manager to complete
Worth, George	Rt 80 Parsippany-Troy Hills Rdwy improvements	B	Project Manager to complete PDS
Patel, Mahesh	Rt 23 over Peckman's Brook	A	Construction Management to complete
Dave, Hardev	Rte 22 Weequahic Park Drainage Improvement	A	CRS completed by QA, Construction Management to Advertise/Award
Dave, Hardev	Bloomfield Ave Bridge	A	CRS completed by QA, Construction Management to Advertise/Award

**Note:**

Active projects not listed above will all follow the new process.

## PDS/FDS SUBMISSION REQUIREMENTS

ITEM	Service Area	Contact	PDS	FDS	COMMENTS
<b>Plan Sets</b>	Environmental Solutions	Janet Fittipaldi	5	5	E team, Landscape, Compliance Team (1 set each) Engineering Unit (2 sets)
	Value Solutions	Paul Schneider	2	2	Structure/ Geometry (1 set each)
	Traffic Engineering	Chris Barrets	3	3	Traffic / Electric / Reg. Traffic Eng. (1 set each)
	Construction Management	Ron Maruca	1	1	Hard Copy
			<b>12</b>	<b>Subtotal</b>	<b>12</b>
<b>Special Provisions</b>	Environmental Solutions	Janet Fittipaldi	0	5	Distribution same as above
	Value Solutions	Paul Schneider	0	2	
	Traffic Engineering	Chris Barrets	0	1	Traffic
	Construction Management	Ron Maruca	0	1	Hard Copy
			<b>0</b>	<b>Subtotal</b>	<b>9</b>
<b>Traffic Impact Report</b>	Value Solutions	Paul Schneider	1	1	
	Traffic Engineering	Chris Barrets	1	1	
			<b>2</b>	<b>Subtotal</b>	<b>2</b>
<b>Construction Schedule</b>	Value Solutions	Paul Schneider	1	1	
	Construction Management	Ron Maruca	1	1	CD & Hard Copy
			<b>2</b>	<b>Subtotal</b>	<b>2</b>
<b>Construction Estimate</b>	Construction Management	Ron Maruca	<b>0</b>	<b>1</b>	Hard Copy
<b>Drainage Report</b>	Environmental Solutions	Janet Fittipaldi	<b>2</b>	<b>2</b>	
<b>Scour Report</b>	Environmental Solutions	Janet Fittipaldi	<b>2</b>	<b>2</b>	
<b>Erosion and Sediment Control Report</b>	Environmental Solutions	Janet Fittipaldi	<b>1</b>	<b>2</b>	
<b>Design Exception Report</b>	Value Solutions	Paul Schneider	<b>3</b>	<b>0</b>	(4 if full oversight)
<b>Structure Design</b>	Value Solutions	Paul Schneider	<b>1</b>	<b>0</b>	(if not in PDS Text)
<b>Appraisal Statement</b>	Value Solutions	Paul Schneider	<b>1</b>	<b>0</b>	
<b>CADD Files</b>	Traffic Engineering	Chris Barrets	<b>1</b>	<b>1</b>	CD & Hard Copy
<b>Signal Timings</b>	Traffic Engineering	Chris Barrets	<b>1</b>	<b>1</b>	CD & Hard Copy
<b>Intersection/highway Lighting</b>	Traffic Engineering	Chris Barrets	<b>1</b>	<b>1</b>	CD & Hard Copy

**LIST OF DOCUMENTS TO BE  
ELIMINATED  
WHEN PHASE 1 IS IMPLEMENTED**

**Corrective Action Notices (CANs)**

- CAN035
- CAN033R
- CAN058
- CAN064
- CAN067

**Baseline Document Changes (BDCs)**

- BDC-97PR-06
- BDC-97PR-009
- BDC-99PR-006
- BDC-99PR-08
- BDC-00PR-02
- BDC-01PR-03
- BDC-02PR-01
- BDC-03PR-01
- BDC-04PR-02
- BDC-04PR-03
- BDC-04PR-04

**Quality Initiative Advisory (QIAs)**

- QIA-043

**POLICY & PROCEDURES**

- 811

**OTHERS**

- Preliminary Design Submission Guidelines
- Final Design Submission Guidelines
- Quality Assurance Plan Guidelines
- Errors / Omissions memos
  - 12/06/05 D. Sichik memo
  - 11/07/07 R. Hammer memo
- Constructability Manual

**LIST OF DOCUMENTS TO BE  
REVISED  
BY IMPLEMENTATION OF PHASE 1**

- Consultant Evaluation Form
- Design Exception Manual
- Prequalification QA Plan and PS-08 form
- Unit Office List – (Units and Unit Tasks)
- Network Diagrams (J. Maida added Contract Meeting to the diagrams – Pipelines 1, 2 &3)
- Design Activity Descriptions
- Consultant Model Agreement